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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,205	02/22/2007	Rudolf Heid	2360-0448PUS1	1643

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EXAMINER

JENNINGS, STEPHANIE M

ART UNIT	PAPER NUMBER
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4135

NOTIFICATION DATE	DELIVERY MODE
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01/27/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/580,205	Applicant(s) HEID ET AL.	
	Examiner STEPHANIE JENNINGS	Art Unit 4135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060523</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 600', 308, 312, 326, 327.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "10", "20", "30", and "40" have been used to designate press station, reference characters "11", "21", "31", and "41" have been used to designate upper die, reference characters "12", "22", "32", and "42" have been used to designate housing, reference characters "13", "23", "33", and "43" have been used to designate lower die, reference characters "14", "24", "34", and "44" have been used to designate press stand, reference characters "15", "25", "35", and "45" have been used to designate work space, reference characters "101" and "102" have both been used to designate vertical post, and reference characters "106" and "107" have both been used to designate drive plate. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet

Art Unit: 4135

submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 1 and 3 are objected to because of the following informalities: lack of antecedent basis for "it". Appropriate correction is required

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear in the claim as drafted what is meant by "...i.e. the lifting and/or lower transporting steps, at least partially take place simultaneously."
7. Claim 8 recites the limitation "the sliding movement" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

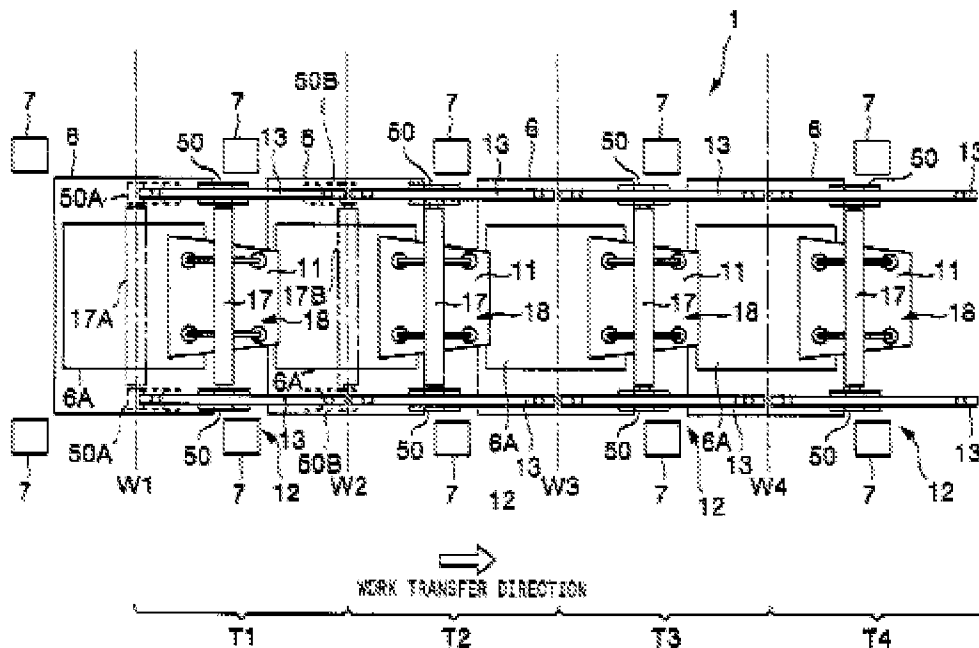
9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1, 2-4, 5, 12, and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamoto US Patent Application Publication 2003/0084701 A1 (cited in Applicant's IDS), VanderZee et al. US Patent No. 5,979,212 and Darr et al. German Patent No. DE 4101513 A1.

12. Kawamoto teaches:



13. Limitations from claim 1, a conveyor for transporting work pieces in a press, in particular a multiple-die press (2), from a first station (W1) to a second station (W2) adjacent to the first station (W1), comprising a) at least one lateral beam (13) arranged on a side of the press, essentially extending parallel to a transport direction of the conveyor (1); b) at least one bar (17) having grippers (15—not shown in figure 1 above) for gripping the work piece to be transported, whereby the bar (17) is attached to the lateral beam (13) in such a way that it is movable along a longitudinal extension of the beam (13); and c) for each lateral beam (13) an assembly (7) for supporting the lateral beam (13) (pages 1-2, paragraph 13).

14. The examiner notes that the applicant has drafted the claim with the use of “or” in line 2. The examiner is tasked with reading the claims broadly and by reading the disjunctive

Art Unit: 4135

connectors, only one of the alternatives in the claim need to be met in order to reject the claim limitation. Disjunctive connectors will be treated the same way in following claims.

15. Examiner must give claims their broadest reasonable interpretation, MPEP §2111, “During patent examination, the pending claims must be ‘given the broadest reasonable interpretation consistent with the specification.’ Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified, *In re Pratter*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969), *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997).” Also see *In re Zletz*, 13 USPQ 2d. 1320 (Fed. Cir. 1989).

16. Limitations from claim 3, the conveyor according to claim 1, characterized in that it comprises two lateral beams (13) arranged across the press and in that the bar is a cross-bar (17) extending across the press, attached to the two lateral beams (13).

17. Limitations from claim 4, the conveyor according to claim 3, characterized in that at least one of the assemblies (7) for supporting one of the two lateral beams (13) is supported such that is relocatable in a direction transverse to the transport direction, in order to adjust a distance between the two lateral beams (13) (pages 1-2, paragraph 13)

18. Limitations from claim 5, the conveyor according to claims 1, characterized in that the assembly (7) further comprises a lift mechanism (13) for displacing the lateral beam (7) in a vertical direction (page 1-2, paragraphs 13 and 14).

Art Unit: 4135

19. Limitations from claim 12, a conveyor system for transporting work pieces in a press line or multiple-die press, comprising a plurality of conveyors (W1-W4) according to claim 1, arranged consecutively (pages 1-2, paragraphs 13-14).

20. Limitations from claim 13, the conveyor system according to claim 12, characterized in that two consecutive conveyors (W1, W2) are arranged such that the work piece (11) may be handed over from a first of the conveyors (W1) to a second of the conveyors (W2), whereby the work piece (11) is flipped (pages 1-2, paragraphs 13-16).

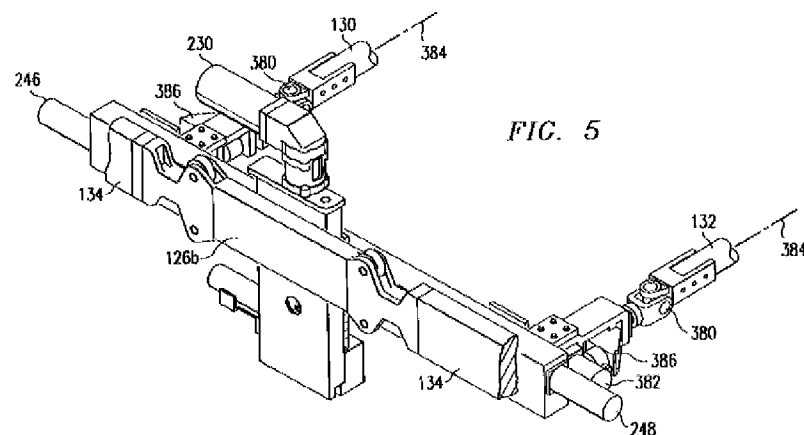
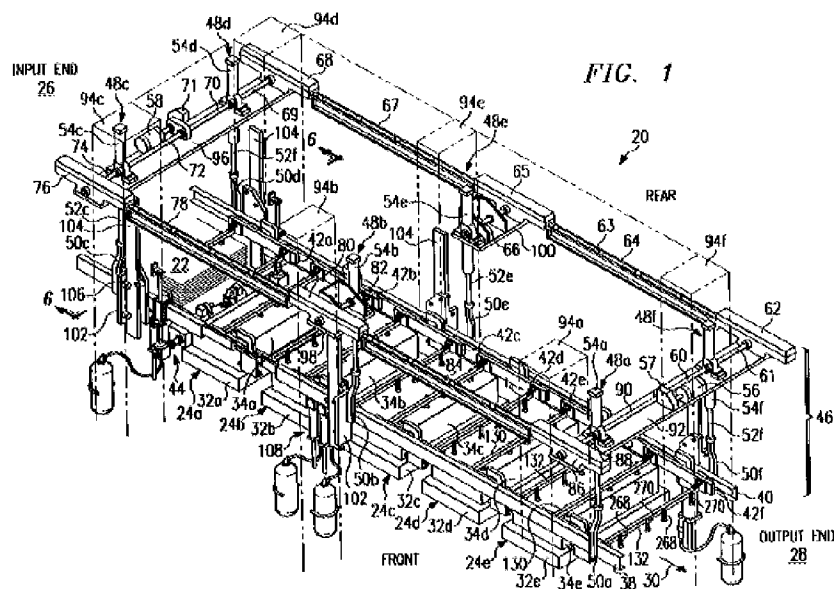
21. Limitations from claim 14, A method for transporting work pieces in a press, in particular a press line or multiple-die press, from a first station (W1) to a second station (W2) adjacent to the first station (W1), employing a bar (17) attached to a lateral beam (13) arranged on a side of the press, extending parallel to a transport direction, comprising the steps of: a) positioning the bar (17) above the work piece (11) situated in the first station (W1); c) gripping the work piece (11) by grippers (15) attached to the bar (17); e) transporting the work piece (11) to the second station (W1) by moving the bar (17) along a longitudinal extension of the beam (13); and g) disengaging the work piece (11) from the grippers (15) (pages 1-2, paragraphs 13-16).

22. Although a disengaging step is not explicitly disclosed, the workpiece would have to be disengaged to transfer between work stations, so the reference does not need to explicitly disclose a disengagement step.

23. Kawamoto teaches a transfer press and method for using, but does not teach a transfer press with pivoting mechanism. VanderZee, however, does.

24. Wherein VanderZee further teaches:

Art Unit: 4135



25. Limitations from claim 1, a conveyor characterized in that d) the assembly (20) comprises a pivoting mechanism (figure 5) (column 2, lines 42-54, column 3, lines 16-19, 28-34 and column 3, line 64-column 4, line 6).

26. Limitations from claim 2, the conveyor according to claim 1, characterized in that the pivoting mechanism (figure 5) is formed such that the pivotal axis crosses a vertical plane

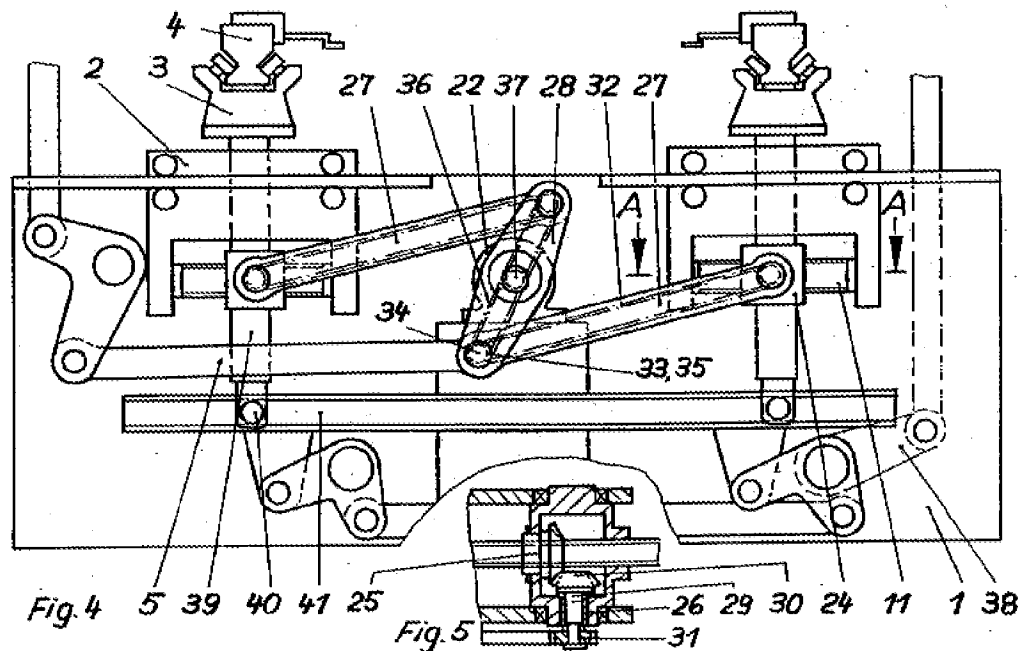
Art Unit: 4135

comprising the lateral beam (38, 40), either through (384) the lateral beam (38, 40), in particular close to a middle portion of the lateral beam (38, 40) (column 3, line 64- column 4, line 6).

27. It would have been obvious to one of ordinary skill in the art at the time of invention to combine Kawamoto's invention with VanderZee's invention because a pivotal beam mechanism allows for an increased workpiece production rate.

28. Kawamoto and VanderZee do not teach a telescopic drive mechanism. Darr, however, teaches this feature.

29. Wherein Darr further teaches:



30. Limitations from claim 1, for pivoting the lateral beam (4) around a horizontal pivotal axis perpendicular to the transport direction; and in that e) the grippers (268, 270) are rotatably movable for at least compensating a change of orientation of the work piece (22) due to the

Art Unit: 4135

pivoting of the lateral beam (4); for at least compensating a change of orientation of the work piece (22) due to the pivoting of the lateral beam (4) (abstract).

31. Limitations from claim 14, b) lowering the bar (130, 132) by pivoting the lateral beam (38, 40) around a horizontal pivotal axis perpendicular to the transport direction; d) lifting the bar (130, 132) by pivoting the lateral beam (38, 40) around the pivotal axis (384); f) positioning the bar (130, 132) in a hand-over position by pivoting the lateral beam (38, 40) around the pivotal axis (384) (column 2, lines 42-54, column 3, lines 16-19, 28-34 and column 3, line 64-column 4, line 6).

32. Limitations from claim 16, the method according to claim 14, characterized by the further step of rotatably moving the grippers (268, 270) for at least compensating a change of orientation of the work piece (22) due to the pivoting of the lateral beam (38, 40) (column 2, lines 42-54, column 3, lines 16-19, 28-34 and column 3, line 64-column 4, line 6).

33. Wherein VanderZee further teaches:

34. Limitations from claim 17, The method according to claim 16, characterized in that the second station (24b) is another conveyor for further transporting the work piece (22), comprising second grippers and in that the method further comprises the step of rotatably moving the grippers (268, 270) such that the work piece (22) held by the grippers may be directly transferred to the second grippers of the other conveyor (24a'), thereby flipping the work piece (22) (column 2, lines 42-54, column 3, lines 16-19, 28-34 and column 3, line 64-column 4, line 6).

35. It would have been obvious to one of ordinary skill in the art at the time of invention to combine Kawamto's and VanderZee's inventions with Darr's invention because a telescopic drive mechanism would increase operating efficiency.

Art Unit: 4135

36. Claim 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over VanderZee and Kawamoto as applied to claim 1 above, and further in view of Darr.

37. Where Darr teaches:

38. Limitations from claim 6, the conveyor according to claim 1, characterized in that the pivoting mechanism (VanderZee, figure 5 above) comprises two spindles (11) coupled to the lateral beam (4), the spindles (11) being independently operable in order to pivot and preferably vertically displace the lateral beam (31) (abstract and figure 5).

39. Limitations from claim 7, the conveyor according to claim 6, characterized in that the lateral beam (31) comprises two couplings (32, 322, 341, 321) arranged along the longitudinal extension of the lateral beam (31), preferably symmetrically and close to a center of the lateral beam (31), whereby each of the couplings (32, 322, 341, 321) cooperates with one of the spindles (33, 33') (abstract, lines 4-10, column 2, lines 21-26, 34-60).

40. Limitations from claim 8, the conveyor according to claim 1, characterized in that the lateral beam (4) comprises a telescopic drive mechanism (abstract, line 5) for the sliding movement of the bar (2) (abstract).

41. Limitations from claim 9, the conveyor according to claim 8, characterized in that the telescopic drive mechanism (abstract, line 5) is constituted by a support beam (3) attached to the pivoting mechanism (screwed spindle, abstract, line 4), a first carriage (5) slidably mounted to the support beam (3) and a second carriage (8, 9) slidably mounted to the first carriage (5) (abstract).

42. Limitations from claim 10, The conveyor according to claim 9, characterized in that an intermediate linear guideway (41) is arranged between the support beam (3) and the first carriage

Art Unit: 4135

(5), whereby the guideway (not shown) is slidable with respect to the support beam (3) as well as to the first carriage (5) (abstract).

43. Limitations from claim 11, the conveyor according to claim 1, characterized in that all the drives for (abstract, line 6) moving the bar (2) along the beam (4) as well as for pivoting the beam (4) are stationary in respect of the motion of the bar (2) along the longitudinal extension of the beam (4) (abstract).

44. It would have been obvious to one of ordinary skill in the art at the time of invention to combine Kawamto's and VanderZee's inventions with Darr's invention because a telescopic drive mechanism would increase operating efficiency.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHANIE JENNINGS whose telephone number is (571)270-7392. The examiner can normally be reached on M-F, 7:30 am-5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William M. Brewster can be reached on (571)272-1854. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

Art Unit: 4135

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. J./

Examiner, Art Unit 4135

January 8, 2009

/William M. Brewster/

Supervisory Patent Examiner, Art Unit 4135